

AMENDMENTS TO THE CLAIMS

1. (Currently amended). A method for producing monosaccharides from biomass comprising:

a first step ~~in which~~ of pre-treating a biomass ~~is pretreated~~ in 65 to 85(w/w)% sulfuric acid at a temperature of 30 to 70°C, and

a second step ~~in which the first step treatment~~ of subjecting the product pretreated in the first step ~~is subjected~~ to saccharification treatment in 20 to 60(w/w)% sulfuric acid at a temperature of 40 to 100°C,

a step 2A of subjecting the treatment product of the second step resulting from saccharification treatment in the second step to filtration,

a step 2B, of separating the filtrate following step 2A into sugar and acid, and

a third step of subjecting the product of step 2B resulting from saccharification treatment in the second step to monosaccharification treatment in 0.5 to 5(w/w)% sulfuric acid at a temperature of 110 to 150°C.

2. (Cancelled).

3. (Cancelled).

4. (Currently amended). The method for producing monosaccharides according to claim 1 [having] wherein the first step includes a step in which spraying the sulfuric acid ~~is sprayed~~ onto and ~~mixed~~ mixing it with the biomass followed by kneading.

5. (Original). The method for producing monosaccharides according to claim 1, wherein the weight-based mixing ratio of the sulfuric acid to biomass is 0.3 to 5.0.

6. (Currently amended). The method for producing monosaccharides according to claim 31, wherein the second step uses a washing filtrate, obtained by washing the solid after step 2A, is used.

7. (Currently amended). The method for producing monosaccharides according to claim 31,

wherein the separation into sugar and acid in step 2B is performed by using a simulated moving bed chromatographic separation device is used for the separation into sugar and acid in step 2B.

8. (Currently amended). The method for producing monosaccharides according to claim 31, wherein the sulfuric acid used in the second step is low-concentration sulfuric acid after step 2B is used for the sulfuric acid of the second step.

9. (Original). The method for producing monosaccharides according to claim 1, wherein the biomass is a cellulose-based biomass.

10. (Original). A monosaccharide production device provided with: a sulfuric acid spraying and mixing device, which sprays 65 to 85(w/w)% sulfuric acid onto a biomass and mixes the sulfuric acid and biomass by rotating to obtain a sulfuric acid-sprayed/mixed biomass, a continuous kneading device which kneads the sulfuric acid-sprayed/mixed biomass from the sulfuric acid spraying and mixing device by applying shear force to obtain a kneaded product, and a hydrolysis reaction device which adds water or low-concentration sulfuric acid to the first step treatment product in the form of the kneaded product from the continuous kneading device to dilute the sulfuric acid concentration to 20 to 60(w/w)% followed by treatment at a temperature of 40 to 100°C; wherein, sequential intermediate products are continuously sent from the sulfuric acid-spraying/mixing device to the hydrolysis reaction device.